Claims

1. A method for monitoring and evaluating the efficacy of a growth factor cancer drug in therapy, said method comprising the steps of

a) collecting and preparing a sample containing cancer cells from an individual diagnosed for cancer and treated with a growth factor cancer drug,

b) determining the level of telomerase activity in said sample,

c) comparing the level of telomerase activity of said sample with the level determined in a sample in said individual before treatment or with a standard level of telomerase activity, and

d) correlating the level telomerase activity with the therapeutic effect of the growth factor cancer drug.

2. The method of claim 1, wherein in step b) the telomerase level is determined by the extension of a nucleic acid substrate from said sample by telomerase and replication of the extended substrate in a primer extension reaction.

3. The method of claim 2, wherein the primer extension reaction is a polymerase chain reaction.

4. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of a receptor from the epidermal growth factor receptor family or an inhibitor of the signaling pathway triggered by the activation of a receptor from the epidermal growth factor receptor family.

5. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of the epidermal growth factor.

6. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of a receptor from the insulin-like growth factor receptor family or an inhibitor of the signaling pathway triggered by the activation of a receptor from the insulin-like growth factor receptor family.

7. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of the insulin like growth factor.

8. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of a receptor from the platelet-derived growth factor receptor family or an inhibitor of the signaling pathway triggered by the activation of a receptor from the platelet-derived growth factor receptor family.

9. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of the platelet-derived growth factor.

10. The method of any one of claims 1 to 3, wherein the growth factor cancer drug is an inhibitor of a receptor from the neurotrophic factors family or an inhibitor of the signaling pathway triggered by the activation of a receptor from the neurotrophic factors family.

11. The method of any one of claims 4, 6, 8 or 10, wherein the growth factor cancer drug is an inhibitor of a component of a MAP kinase pathway.

12. The method of claim 11, wherein the growth factor cancer drug is a MEK inhibitor.

13. The method of claim 11, wherein the growth factor cancer drug is a src inhibitor.

14. The use of a method of detecting telomerase activity for monitoring and evaluating the efficacy of a growth factor cancer drug in therapy.

15. The use of claim 14, wherein the telomerase activity detection method is the telomerase extension method.

16. The use of claim 14 or 15, wherein the telomerase activity detection method is in the form of a kit.